Electronic Acknowledgement Receipt					
EFS ID:	7462022				
Application Number:	10619796				
International Application Number:					
Confirmation Number:	7886				
Title of Invention:	SPARSE AND EFFICIENT BLOCK FACTORIZATION FOR INTERACTION DATA				
First Named Inventor/Applicant Name:	Francis X. Canning				
Customer Number:	20995				
Filer:	John R. King/Shirley Martinez				
Filer Authorized By:	John R. King				
Attorney Docket Number:	CANNING.001CP2				
Receipt Date:	21-APR-2010				
Filing Date:	15-JUL-2003				
Time Stamp:	18:56:40				
Application Type:	Utility under 35 USC 111(a)				

## **Payment information:**

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$1055
RAM confirmation Number	7395
Deposit Account	111410
Authorized User	KNOBBE MARTENS OLSON AND BEAR

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1 Issue Fee Payment (PTO-85B)	CANNING-001CP2_issuefee.pdf	99539	no	1	
		e0104046722b2b9cb5bb51d711aa9a09c3 b2e3d0			
Warnings:					
Information:					
2 Miscellaneous Incoming Letter	CANNING-001CP2_commun. pdf	81688	no	2	
		43bf8f257ad609a7df5cbbe548c936a93a73 4cdd			
Warnings:					
Information:					
3 Fee Worksheet (PTO-875)	fee-info.pdf	31848	no	2	
		22e8d1b58de15ffc4c81943e238eca07dfc9 77da			
Warnings:		•			
Information:					
		Total Files Size (in bytes)	21	3075	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

## New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

## National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

## New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.